TA-F245R

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model

• This set is almost the same as model TA-F235R previously produced. Therefore, see the service manual for the information which is not contained in this service manual.

Page	Ref. No.	Part No.	Description
18	1	4-966-633-01	PANEL, FRONT
	7	X-4944-924-1	BASE ASSY, PANEL
	8	X-4945-054-1	KNOB (R48) ASSY
	*12	A-4369-784-A	DISPLAY BOARD, COMPLETE (AEP, UK, E, AUSTRALIAN)
	*12	A-4369-804-A	DISPLAY BOARD, COMPLETE (G)
19	*52	A-4369-788-A	MAIN BOARD, COMPLETE (AE1, UK, E, AUSTRALIAN)
	*52	A-4369-800-A	MAIN BOARD, COMPLETE (AE2)
	*52	A-4369-806-A	MAIN BOARD, COMPLETE (G)
	*57	4-966-218-01	PANEL, BACK (AE1)
	*57	4-966-218-11	PANEL, BACK (AE2)
	*57	4-966-218-21	PANEL, BACK (G)
	*57	4-966-218-31	PANEL, BACK (UK)
	*57	4-966-218-41	PANEL, BACK (E)
	*57	4-966-218-51	PANEL, BACK (AUSTRALIAN)
22	C512	————	(JW1512)
	C612	————	(JW1602)
26		3-758-871-11	MANUAL, INSTRUCTION (English, French, Spanish, Portguese, Italian) (AEP, UK, E, AUSTRALIAN)
		3-758-871-41	MANUAL, INSTRUCTION (German, Dutch, Swedish, Danish, Finnish) (AEP)
		3-758-871-51	MANUAL, INSTRUCTION (German) (G)
		3-758-871-61	MANUAL, INSTRUCTION (Polish, Russian) (AE2)
		3-758-871-71	MANUAL, INSTRUCTION (Czech, Hungarian) (AE2)
		*4-931-988-91	INDIVIDUAL CARTON

NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

INTEGRATED STEREO AMPLIFIER

SONY®

English
94E0578-1
Printed in Japan

© 1994. 5

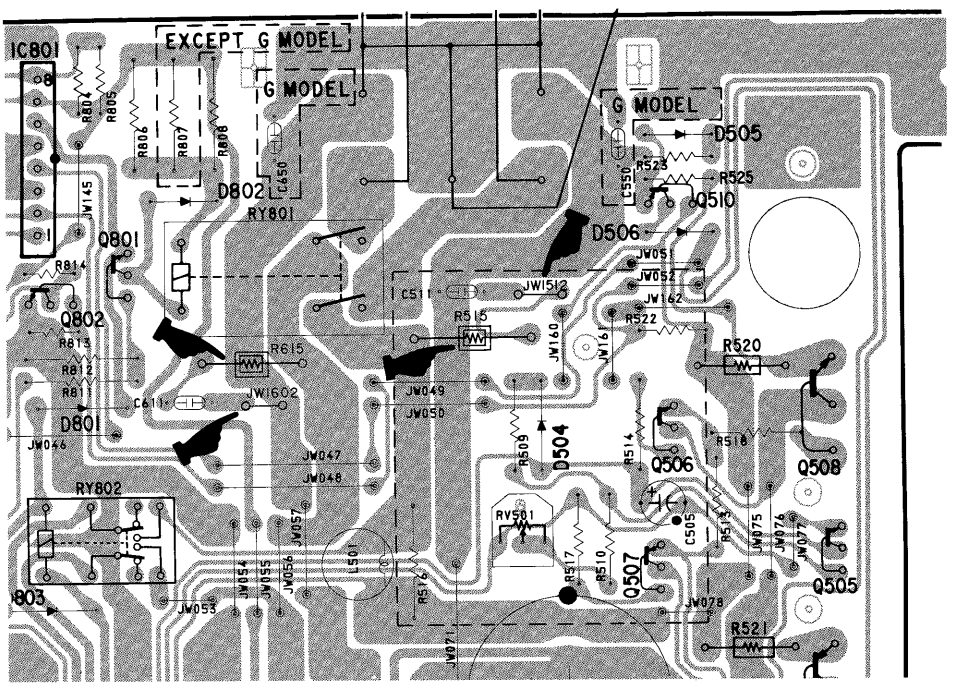
Sony Corporation
Comsumer A&V Products Company
Home A&V Products Div.

9-959-585-11

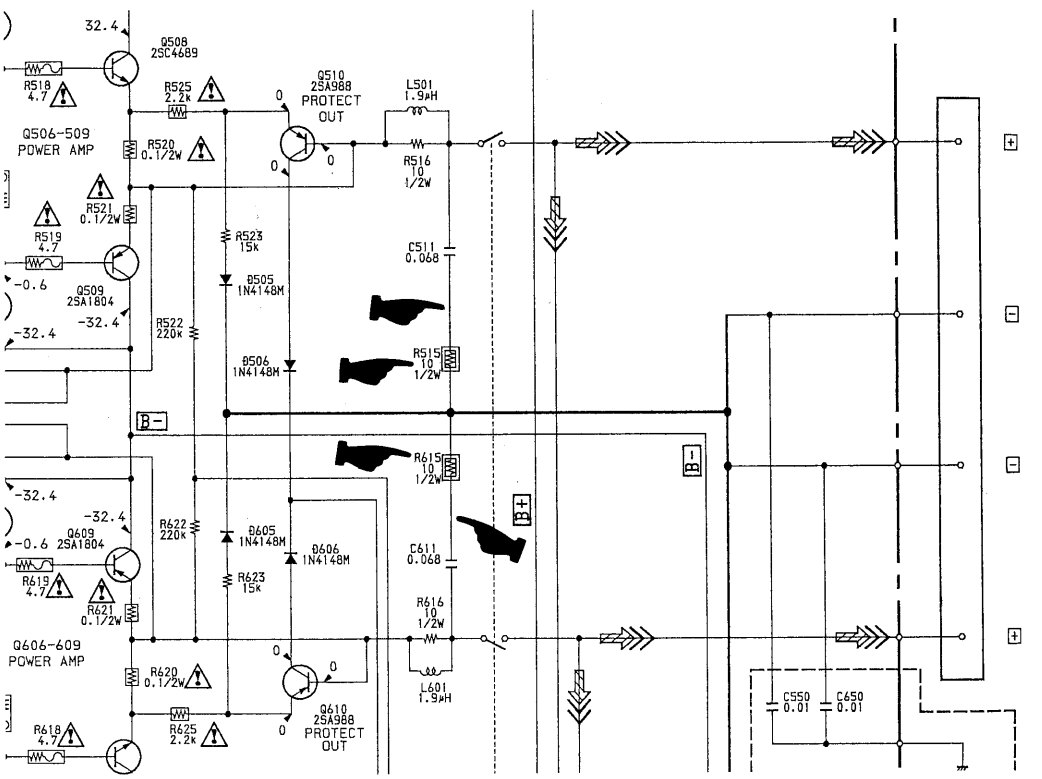
Published by Home A&V Products Div.
Quality Engineering Dept.

: difference portion

- **PRINTED WIRING BOARD**
  Page 10
  (Location C-7 to C-9)



- **SCHEMATIC DIAGRAM**
  Page 15
  (Location E-18 to F-18)



TA-F235R

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model

SPECIFICATIONS

Amplifier
Continuous RMS power output (both channels driven simultaneously)
Except for Germany

DIN, 1 kHz	8 ohms	40 W + 40 W
20 Hz – 20 kHz (0.03%)	8 ohms	30 W + 30 W

Germany

DIN, 1 kHz	4 ohms	40 W + 40 W
20 Hz – 20 kHz (0.05%)	4 ohms	30 W + 30 W

Input

Input jack	Jack type	Sensitivity	impedance
PHONO (MM)	Phono	2.0 mV	50 kilohms
TUNER, CD, DAT/TAPE 1 TAPE 2	Phono	150 mV	50 kilohms

S/N

PHONO (MM)	70 dB
TUNER, CD, DAT/TAPE 1 TAPE 2	100 dB

Output

Output jack	Jack type	Voltage/impedance
REC OUT	Phono jack	Voltage 450 mV impedance 1 kohm
HEADPHONES	Stereo phono jack	Accepts low and high impedance headphones

Tone controls

	Response	Turnover frequency
BASS	± 10 dB (100 Hz)	400 Hz
TREBLE	± 10 dB (10 kHz)	4 kHz

Harmonic distortion Less than 0.008% at 10 W output
Intermodulation (IM) distortion (60 Hz : 7 kHz = 4 : 1)
Less than 0.008% at 10 W output
Frequency response PHONO: RIAA equalization curve ± 0.5 DB
TUNER, CD, DAT/TAPE 1, TAPE 2: 7 Hz – 100 kHz $^{+0}_{-3}$ dB
Residual noise Less than 170 μV (network A)
Damping factor 50 (8 ohms, 1 kHz)

General
System Preamplifier: Low-noise, equalizer amplifier
Power amplifier: Pure-complementary SEPP OCL power amlifier with all stages directry coupled
Power requirements Model for UK, Australian: 240 V AC, 50/60 Hz
Models for European countries: 220 V – 230 V AC, 50/60 Hz
Models for other coutries: 120 V 220 V or 240 V AC adjustble, 50/60 Hz
Power Consumption Model for Scandinavian countries, Switzerland, Spain and Portugal 100 W
Model for other European countries 100 W
Model for other countries 100 W
Dimension Approx. 430 × 115 × 310 mm (w/h/d) (17 × 4 1/2 × 12 1/5 inches)
Weight Approx. 5.0 kg (13 lb 14 oz)
Supplied accessories Remote commander RM-S312 (1)
Sony SUM-3 (NS) batteries (2)

The above values are measured at 230 V AC. (AEP model)

Design and specifications are subject to change without notice.

INTEGRATED STEREO AMPLIFIER

SONY®

TABLE OF CONTENTS

Section	Title	Page
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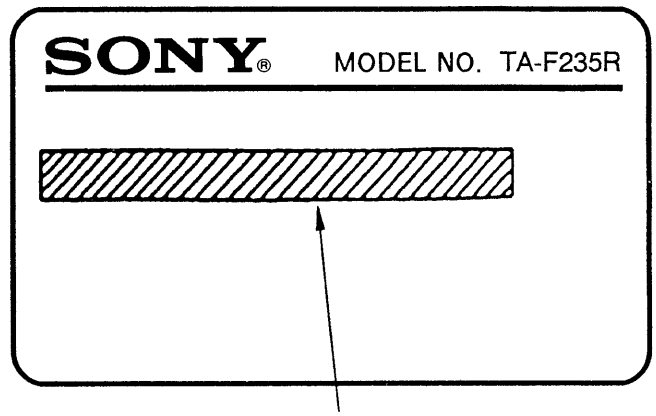
4.	**EXPLODED VIEWS**	18
5.	**ELECTRICAL PARTS LIST**	20

MODEL IDENTIFICATION

– Specification Label Printed on Back Panel –



AEP, Germany model: AC 220 -230 V ~50/60 Hz
Australian, UK model: AC 240 V ~50/60 Hz
E model: AC 120/220/240 V~50/60 Hz

Note :

There are two type of AEP models which are depend on countries.

AEP2 model : Model for Scandinavian countries, Switzerland, Spain and Portugal

AEP1 model : Model for other European countries

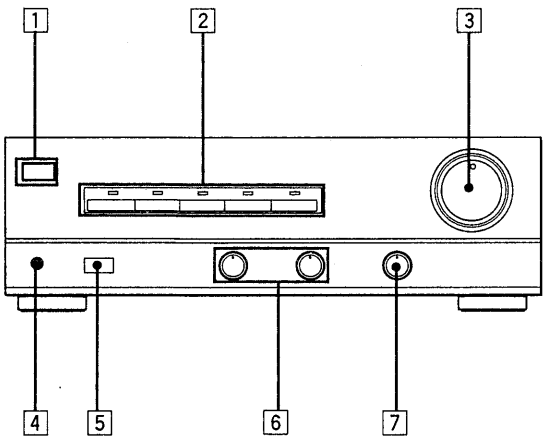
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

This section is extracted from instruction manual.

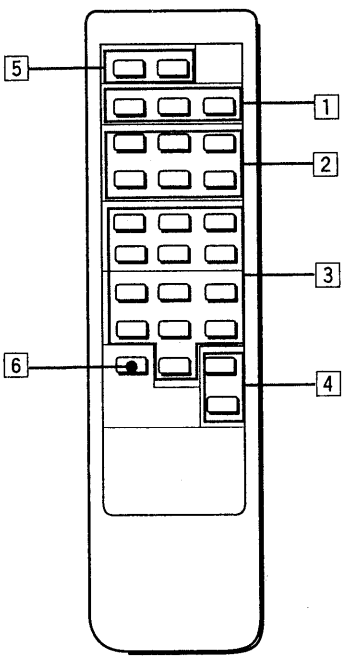
Identifying the Parts and Controls



This section describes about each name of this amplifier and remote commander.

Front Panel

1 POWER switch
2 Function selectors and indicators
3 VOLUME control and indicator
Adjusts the sound level.
4 HEADPHONES jack
5 Remote control sensor
6 TONE (BASS/TREBLE) controls
7 BALANCE control



Remote Commaner

1 TUNER operation buttons
TUNER: Select the TUNER mode.
PRESET +/– buttons: Select the preset station.
2 CD operation buttons
I◄◄/►►I: Automatic music sensor.
D. (Disc) SKIP: Disc skip (for CD player equipped with a multi-disc changer)
►: The amplifier enters the CD mode and the CD player starts playback automatically.
■: Stop.
II: Pause.
3 TAPE 2 DECK A/DECK B operation buttons
◄◄/►►: Fast winding.
■: Stop.
◄: The amplifier enters the TAPE 2 mode and the tape deck starts reverse playback automatically.
►: The amplifier enters the TAPE 2 mode and the tape deck starts forward playback automatically.
●: Recording.
II: Pause. (Only for DECK B)
4 VOL (Volume) +/– buttons
5 PHONO operation buttons
START: Pressing START automatically selects the PHONO mode on the amplifier and starts playback of the turntable system.
STOP: Stops playback of the turntable system.
6 DAT/TAPE 1 button
Selects the DAT or TAPE 1 mode.

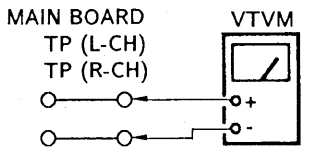
SECTION 2
ELECTRICAL ADJUSTMENTS

Note :

1. DC BIAS adjustments should be made within 2 to 3 minutes after the POWER switch is turned on (POWER ON).
2. After replacing the power transistors, DC BAIS adjustments should be made.

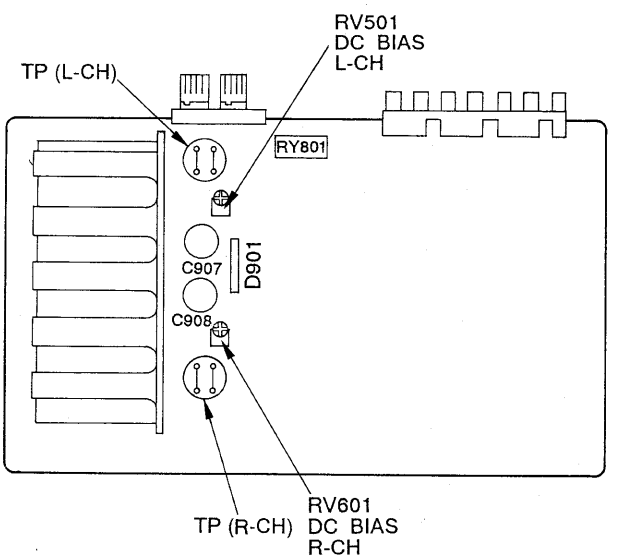
DC Bias Adjustment (with no signal input)

Procedure :



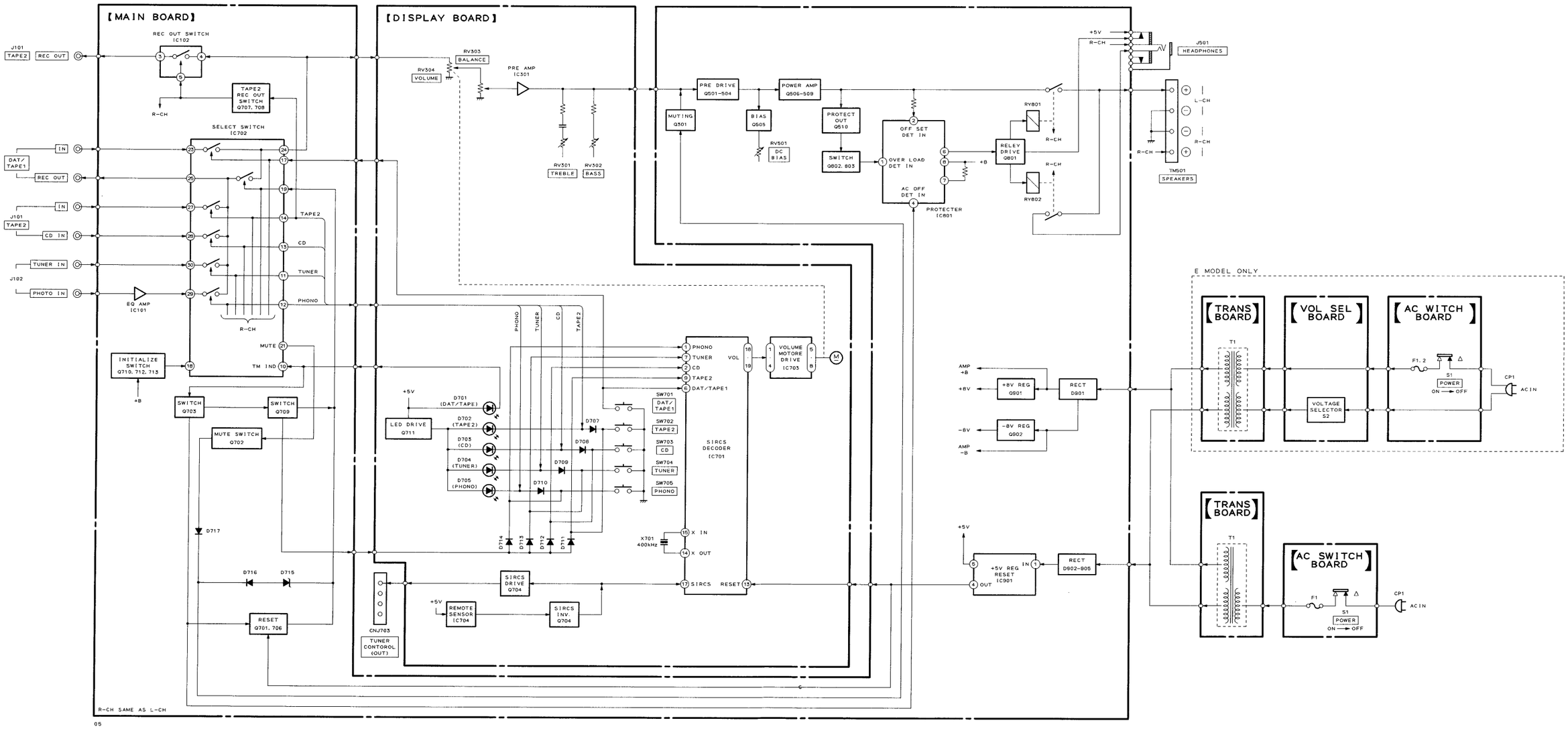
	Adjustment part	Reading on VTVM
L-CH	RV501	6.5mV
R-CH	RV601	6.5mV

[ADJUSTMENT LOCATIONS]



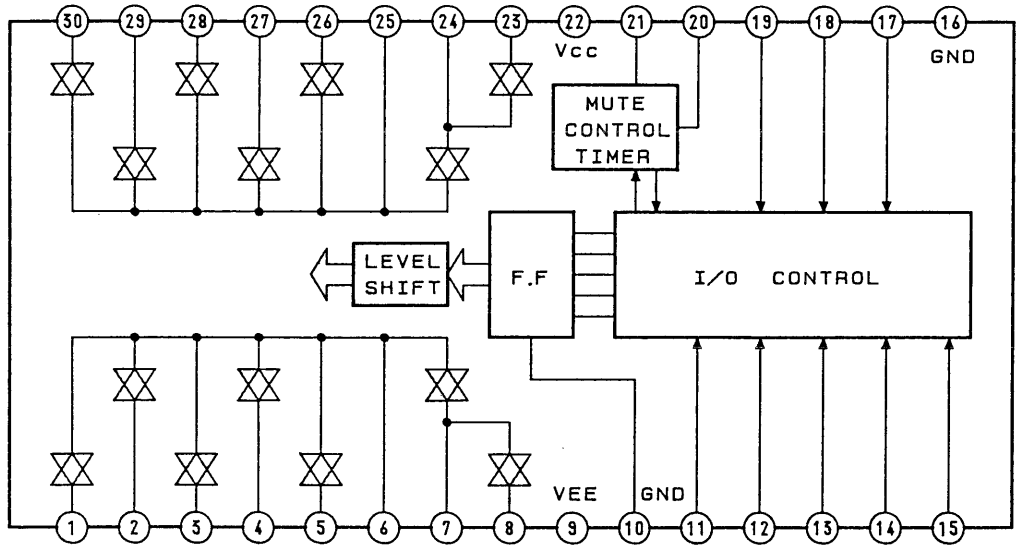
SECTION 3
DIAGRAMS

3-1. BLOCK DIAGRAM

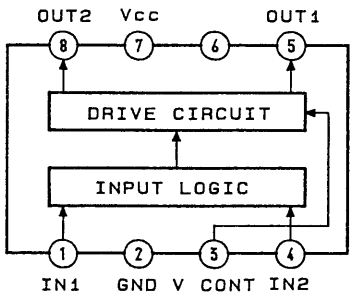


• IC BLOCK DIAGRAMS

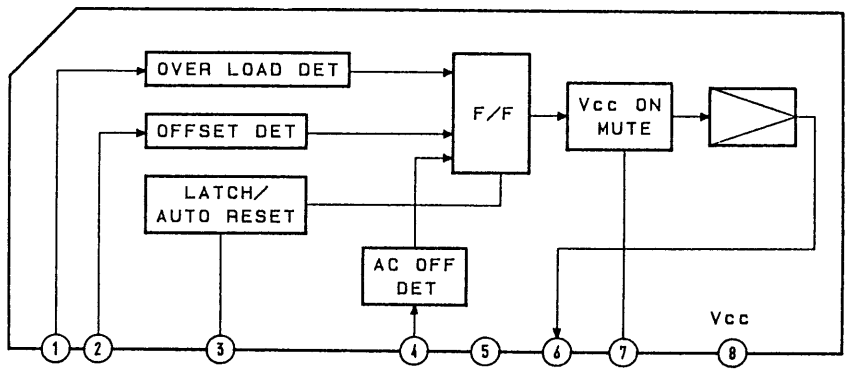
IC702 LC7818



IC703 LB1639



IC801 UPC1237HA



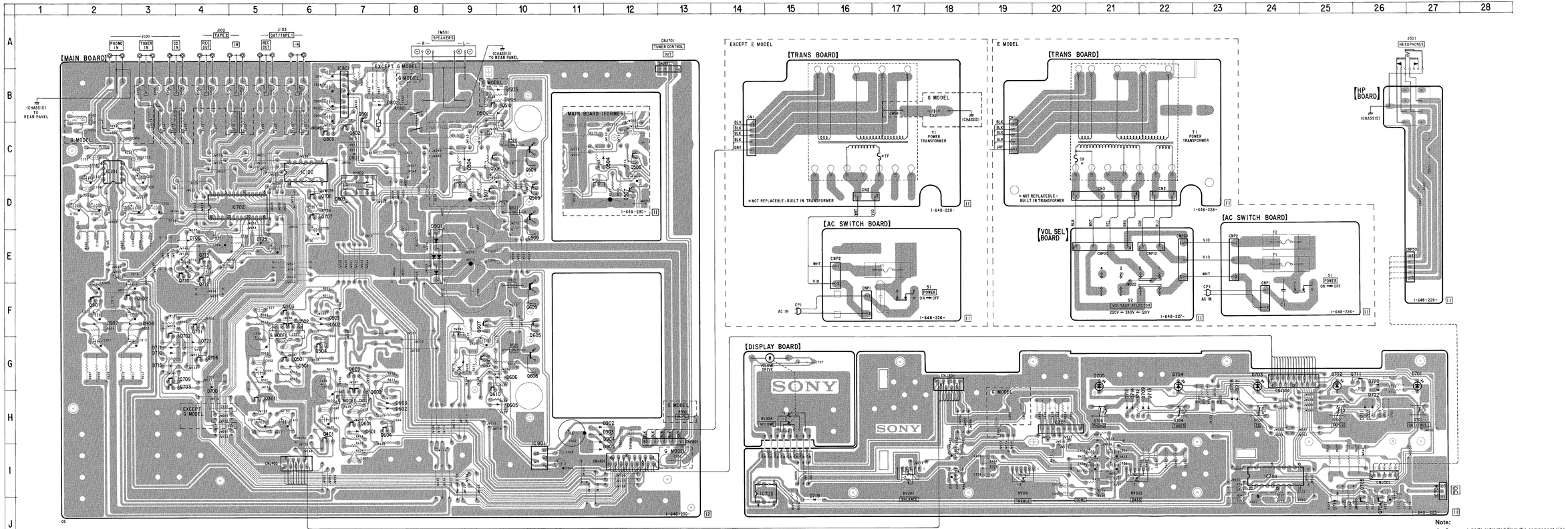
3-2. IC701 FUNCTION CONTROLLER (M50761-291P).

Micro Processor M50761-291P is used for control the volume up/down, function select and power on/standby by SIRCS code signal input and power on/standby key code signal input.

Pin No.	Pin Name	I /O	Description
1	$\overline{\text{PHONO}}$	O	Function select output. (one-shot output) (L : PHONO)
2	$\overline{\text{CD}}$	O	Function select output. (one-shot output) (L : CD)
3	$\overline{\text{AUX}}$	O	Function select output. (one-shot output) (L : AUX)
4	CN VSS	—	Ground
5	VSS	—	Ground
6	$\overline{\text{TAPE1}}$	O	Function select output. (one-shot output) (L : TAPE1)
7	$\overline{\text{TUNER}}$	O	Function select output. (one-shot output) (L : TUNER)
8	$\overline{\text{POWER}}$	O	Power supply ON/OFF relay (RY1) control output. (L : POWER ON, H : POWER OFF)
9	$\overline{\text{TAPE2}}$	O	Function select output. (one-shot output) (L : TAPE2)
10	$\overline{\text{POWER IN}}$	I	POWER ON/STANDBY key switch input.
11	MODE	I	Mode select input. This model is used "L" level only.
12	NC	—	Ground
13	RESET	I	Reset signal input.
14	X OUT	O	Ceramic viblator connection terminal. (400Hz)
15	X IN	O	Ceramic viblator connection terminal. (400Hz)
16	NC	—	Ground
17	SIRCS	I	SIRCS code signal input. (serial input)
18	$\overline{\text{VOL UP}}$	O	Volume motor up control output. (contineous output)
19	$\overline{\text{VOL DOWN}}$	O	Volume motor down control output. (contineous output)
20	VDD	—	+5V power supply.

	POWER ON/OFF mode
H	USED
L	NOT USED

3-3. PRINTED WIRING BOARDS • See page 17 for Semiconductor Lead Layouts.



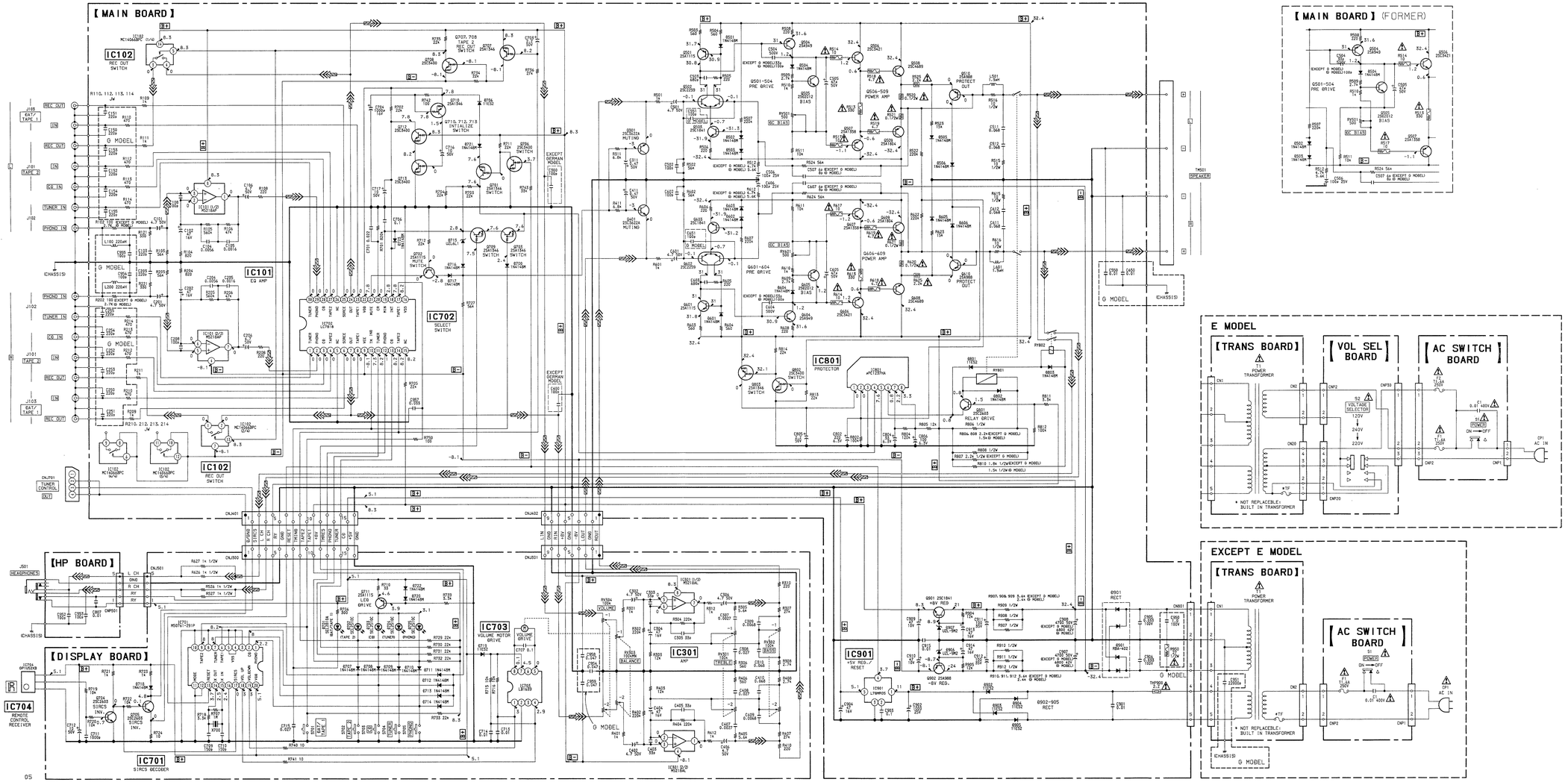
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D501	G-6	IC301	H-20
D502	F-6	IC701	I-24
D503	F-6	IC702	D-5
D504	C-9	IC703	I-14
D505	B-10	IC704	I-27
D506	B-9	IC801	B-7
D601	H-7	IC901	I-10
D602	H-8		
D603	H-8	Q301	H-5
D604	G-9	Q401	H-6
D605	H-10	Q501	G-6
D606	G-10	Q502	F-6
D700	G-4	Q503	F-6
D701	G-27	Q504	G-6
D702	G-25	Q505	D-10
D703	G-24	Q506	C-9
D704	G-22	Q507	D-9
D705	G-21	Q508	C-10
D706	E-4	Q509	E-10
D707	H-26	Q510	B-10
D708	H-23	Q601	H-7
D709	H-22	Q602	H-7
D710	H-21	Q603	G-7
D711	H-26	Q604	H-7
D712	H-23	Q605	F-10
D713	H-22	Q606	G-9
D714	H-21	Q607	F-9
D715	G-3	Q608	G-10
D716	G-3	Q609	F-10
D717	G-3	Q610	H-9
D718	J-25	Q701	F-4
D719	J-25	Q702	F-4
D720	G-26	Q703	G-4
D721	G-4	Q704	J-26
D722	H-26	Q705	I-26
D723	E-5	Q706	G-4
D801	C-7	Q707	D-6
D802	B-7	Q708	D-6
D803	D-7	Q709	G-4
D901	E-8	Q710	E-4
D902	H-11	Q711	G-26
D903	H-11	Q712	E-4
D904	H-11	Q713	E-4
D905	I-11	Q801	B-7
D906	F-3	Q802	C-7
D907	F-2	Q803	C-6
		Q901	F-2
IC101	C-2	Q902	F-3
IC102	C-6		

Note:
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- : nonflammable resistor.
- : fusible resistor.

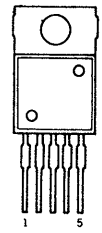
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- : B+ Line.
- : B− Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions. no mark :PHONO
- Voltages are taken with a VOM (10 MΩ/V). Voltage variations may be noted due to normal production tolerances.
- Signal path. : PHONO



• SEMICONDUCTOR LEAD LAYOUTS

L78MR05



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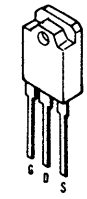
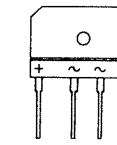
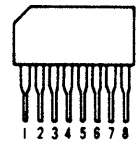
2SC4689-RO



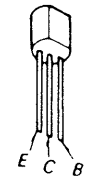
RBA-402



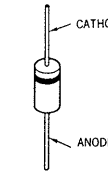
M5218AP
μPC1237HA



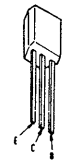
2SA949-OY
2SA988-PAFAEA
2SC1841-PAFAEA



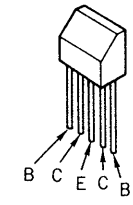
1N4148M



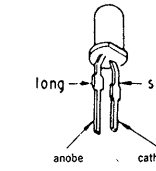
DTA124ES
DTC124ES
2SC2603-EF
2SC3622A-LK



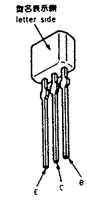
2SC2259-FG



SEL3510C-CD
SEL3810A-CD

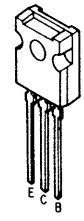


2SA1175-HFE

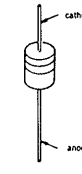


2SD2012

2SA1358-OY
2SC3421-OY



HZS6A3L
UZL-9M2
UZL-9M3
11ES2



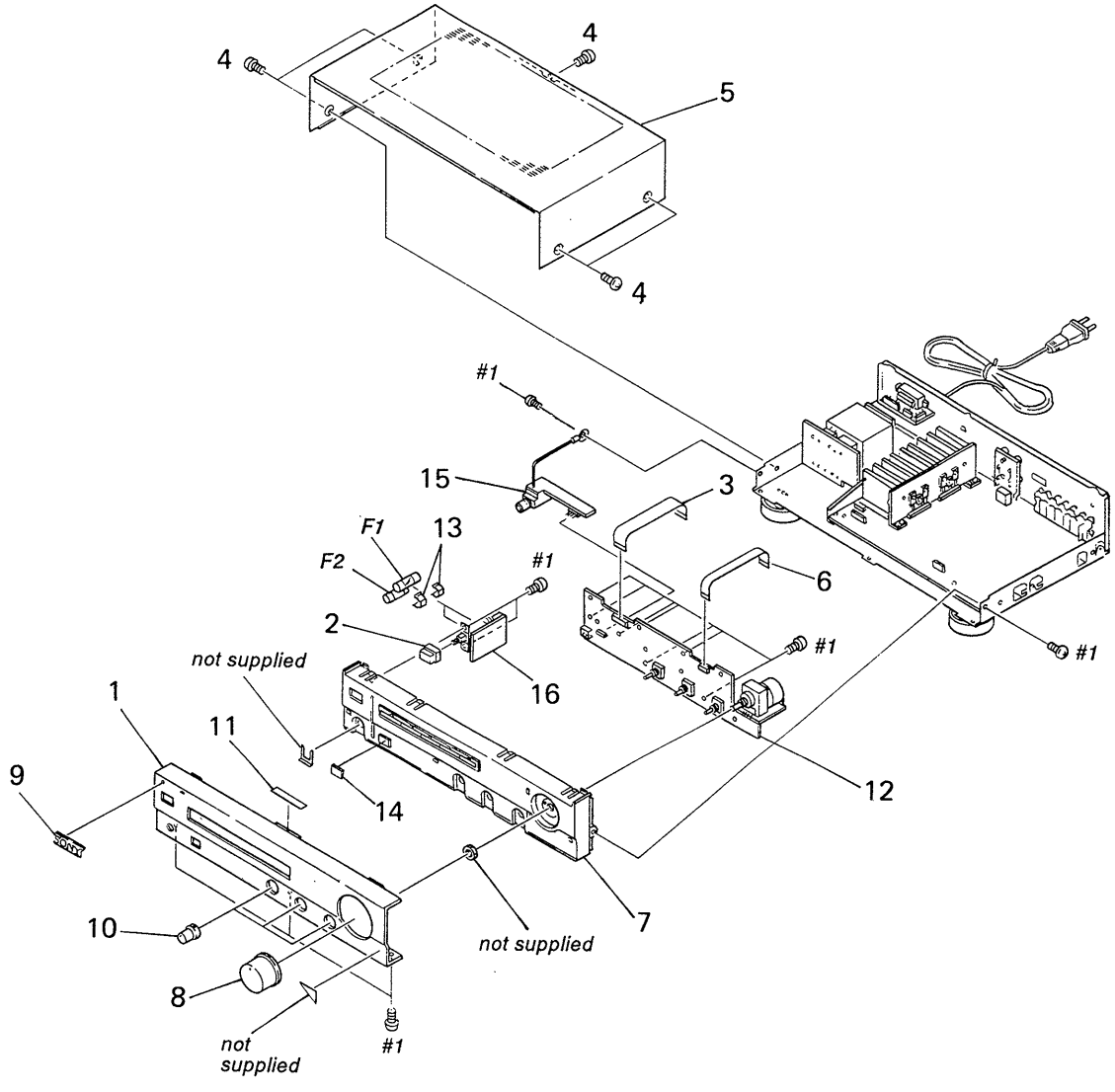
SECTION 4
EXPLODED VIEWS

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

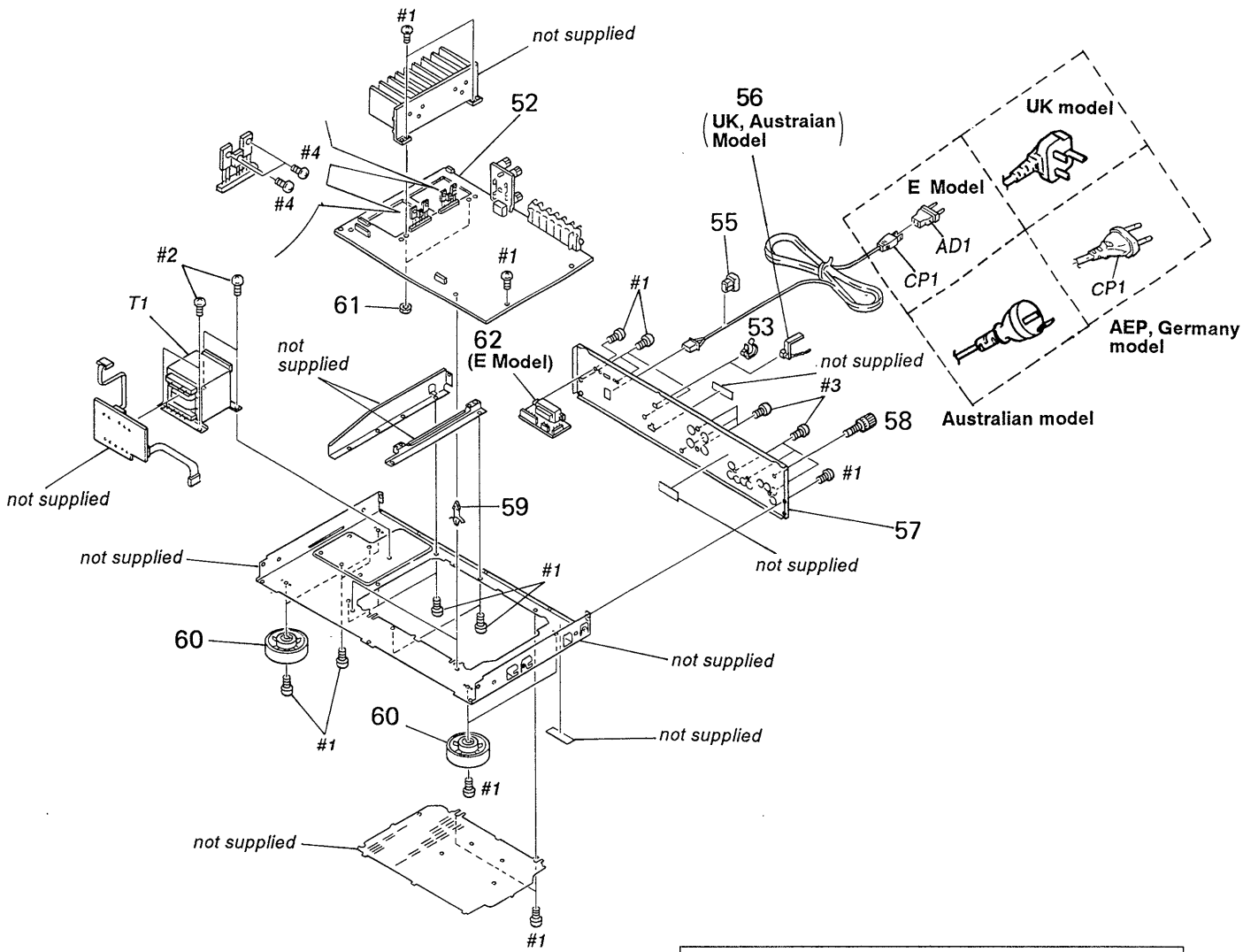
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

(1) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
1	4-958-635-01	PANEL, FRONT	
2	4-917-460-01	KNOB, POWER	
3	1-751-432-11	WIRE (FLAT TYPE) (17 CORE)	
4	3-704-366-01	SCREW (CASE) (M3X8)	
* 5	4-937-817-11	CASE	
6	1-751-433-11	WIRE (FLAT TYPE) (9 OCRE)	
7	X-4943-696-1	BASE ASSY, PANEL	
8	X-4943-697-1	KNOB ASSY	
9	4-942-568-01	EMBLEM (NO. 5), SONY	
10	4-958-636-01	KNOB	
11	9-911-837-XX	CUSHION	
* 12	A-4360-805-A	DISPLAY BOARD, COMPLETE (AEP, UK, E, AUSTRALIAN)	
* 12	A-4360-806-A	DISPLAY BOARD, COMPLETE (G)	
13	1-533-293-11	FUSE HOLDER	
14	4-931-911-01	FILTER	
15	1-648-229-11	PC BOARD, HP	
16	1-648-226-11	PC BOARD, AC SW	
⚠F1	1-532-285-00	FUSE T1.6A 250V	
⚠F2	1-532-285-00	FUSE T1.6A 250V (E)	

(2) CHASSIS SECTION



Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
52	A-4360-799-A	MAIN BOARD, COMPLETE (AE1)	
* 52	A-4360-800-A	MAIN BOARD, COMPLETE (AE2)	
* 52	A-4360-801-A	MAIN BOARD, COMPLETE (G)	
* 52	A-4360-802-A	MAIN BOARD, COMPLETE (UK)	
* 52	A-4360-803-A	MAIN BOARD, COMPLETE (E)	
* 52	A-4360-804-A	MAIN BOARD, COMPLETE (AUSTRALIAN))	
* 53	4-949-235-01	HOOK (AEP, E, G)	
* 55	3-703-244-00	BUSHING (2104), CORD (AEP, UK, G, AUSTRALIAN)	
* 55	3-703-571-11	BUSHING (S) (4516), CORD (E)	
56	4-956-370-02	BAND, PLUG FIXED (UK, AUSTRALIAN)	
* 57	4-958-640-01	PANEL, BACK (AE1)	
* 57	4-958-640-11	PANEL, BACK (AE2)	
* 57	4-958-640-21	PANEL, BACK (G)	
* 57	4-958-640-31	PANEL, BACK (UK)	
* 57	4-958-640-41	PANEL, BACK (E)	

Ref. No.	Part No.	Description	Remark
* 57	4-958-640-51	PANEL, BACK (AUSTRALIAN)	
58	4-947-010-01	SCREW, FEEDER FIXED	
* 59	3-346-265-11	HOLDER, PC BOARD	
60	4-943-148-42	FOOT (F58175SW)	
61	4-960-258-01	WASHER	
62	1-648-227-11	PC BOARD, VOLSEL (E)	
⚠AD1	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
⚠CP1	1-575-651-21	CORD, POWER (AEP, G)	
⚠CP1	1-696-027-11	CORD, POWER (E)	
⚠CP1	1-696-586-11	CORD, POWER (UK)	
⚠CP1	1-696-845-11	CORD, POWER (AUSTRALIAN)	
⚠T1	1-423-676-11	TRANSFORMER, POWER (AEP)	
⚠T1	1-423-677-11	TRANSFORMER, POWER (G)	
⚠T1	1-423-678-11	TRANSFORMER, POWER (E)	
⚠T1	1-423-681-11	TRANSFORMER, POWER (UK, AUSTRALIAN)	

AC SW **DISPLAY**

SECTION 5
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH
- G:German

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	1-648-226-11	AC SW BOARD			
		**********			
		< CAPACITOR >			
⚠C1	1-161-744-00	CERAMIC	0.01uF		400V
		< CONNECTOR >			
* CNP1	1-580-230-31	PIN, CONNECTOR (PC BOARD) 2P			
CNP2	1-564-321-00	PIN, CONNECTOR 2P (AEP, UK, G, AUSTRALIAN)			
CNP2	1-564-687-11	PIN, CONNECTOR 3P (E)			
		< FUSE >			
⚠F1	1-532-285-00	FUSE T1.6A	250V		
⚠F2	1-532-285-00	FUSE T1.6A	250V (E)		
		< SWITCH >			
⚠S1	1-572-267-51	SWITCH, PUSH (AC POWER) (1 KEY)			
**********					
	A-4360-805-A	DISPLAY BOARD, COMPLETE (AEP, UK, E			
		**********			
		AUSTRALIAN)			
		**********			
	A-4360-806-A	DISPLAY BOARD, COMPLETE (G)			
		**********			
*	1-533-293-11	FUSE HOLDER			
*	1-690-880-31	LEAD (WITH CONNECTOR) (G)			
		< CAPACITOR >			
C302	1-123-369-00	ELECT	4.7uF	20%	50V
C303	1-162-211-31	CERAMIC	33PF	5%	50V
C304	1-123-306-00	ELECT	47uF	20%	10V
C305	1-162-211-31	CERAMIC	33PF	5%	50V
C306	1-123-369-00	ELECT	4.7uF	20%	50V
C307	1-130-476-00	MYLAR	0.0027uF	5%	50V

Ref. No.	Part No.	Description			Remark
C308	1-130-488-00	MYLAR	0.027uF	5%	50V
C309	1-130-481-00	MYLAR	0.0068uF	5%	50V
C310	1-130-493-00	MYLAR	0.068uF	5%	50V
C402	1-123-369-00	ELECT	4.7uF	20%	50V
C403	1-162-211-31	CERAMIC	33PF	5%	50V
C404	1-123-306-00	ELECT	47uF	20%	10V
C405	1-162-211-31	CERAMIC	33PF	5%	50V
C406	1-123-369-00	ELECT	4.7uF	20%	50V
C407	1-130-476-00	MYLAR	0.0027uF	5%	50V
C408	1-130-488-00	MYLAR	0.027uF	5%	50V
C409	1-130-481-00	MYLAR	0.0068uF	5%	50V
C410	1-130-493-00	MYLAR	0.068uF	5%	50V
C707	1-164-159-11	CERAMIC	0.1uF		50V
C709	1-162-284-31	CERAMIC	150PF	10%	50V
C710	1-162-284-31	CERAMIC	150PF	10%	50V
C711	1-162-294-31	CERAMIC	0.001uF	10%	50V
C712	1-124-907-11	ELECT	10uF	20%	50V
C713	1-162-294-31	CERAMIC	0.001uF	10%	50V
C714	1-162-294-31	CERAMIC	0.001uF	10%	50V
C715	1-130-488-00	MYLAR	0.027uF	5%	50V
C951	1-164-097-11	CERAMIC	0.022uF		50V (G)
C954	1-136-161-00	FILM	0.047uF	5%	50V (G)
C958	1-136-161-00	FILM	0.047uF	5%	50V (G)
C959	1-136-161-00	FILM	0.047uF	5%	50V (G)
		< CONNCTOR >			
CNJ300	1-750-234-11	CONNECTOR, FFC/FPC 17P			
CNJ301	1-750-586-11	CONNECTOR, FFC/FPC 9P			
		< DIODE >			
D701	8-719-313-72	LED SEL3810A-CD			
D702	8-719-018-46	LED SEL3510C-CD			
D703	8-719-018-46	LED SEL3510C-CD			
D704	8-719-018-46	LED SEL3510C-CD			
D705	8-719-018-46	LED SEL3510C-CD			
D707	8-719-987-63	DIODE 1N4148M			

Ref. No.	Part No.	Description				Remark
D708	8-719-987-63	DIODE	1N4148M			
D712	8-719-987-63	DIODE	1N4148M			
D709	8-719-987-63	DIODE	1N4148M			
D710	8-719-987-63	DIODE	1N4148M			
D711	8-719-987-63	DIODE	1N4148M			
D713	8-719-987-63	DIODE	1N4148M			
D714	8-719-987-63	DIODE	1N4148M			
D718	8-719-987-63	DIODE	1N4148M			
D719	8-719-200-82	DIODE	11ES2			
D720	8-719-987-63	DIODE	1N4148M			
D722	8-719-987-63	DIODE	1N4148M			
		< IC >				
IC301	8-759-634-50	IC	M5218AL			
IC701	8-759-077-08	IC	M50761-291P			
IC703	8-759-820-62	IC	LB1639			
IC704	8-749-923-43	IC	GP1U57XB			
		< TRANSISTOR >				
Q704	8-729-620-05	TRANSISTOR	2SC2603-EF			
Q705	8-729-620-05	TRANSISTOR	2SC2603-EF			
Q711	8-729-119-76	TRANSISTOR	2SA1175-HFE			
		< RESISTOR >				
R301	1-259-428-11	CARBON	1K	5%	1/6W	
R302	1-259-484-11	CARBON	220K	5%	1/6W	
R303	1-259-454-11	CARBON	12K	5%	1/6W	
R304	1-259-484-11	CARBON	220K	5%	1/6W	
R305	1-259-446-11	CARBON	5.6K	5%	1/6W	
R306	1-259-422-11	CARBON	560	5%	1/6W	
R307	1-259-462-11	CARBON	27K	5%	1/6W	
R308	1-259-438-11	CARBON	2.7K	5%	1/6W	
R310	1-259-412-11	CARBON	220	5%	1/6W	
R312	1-259-428-11	CARBON	1K	5%	1/6W	
R401	1-259-428-11	CARBON	1K	5%	1/6W	
R402	1-259-484-11	CARBON	220K	5%	1/6W	
R403	1-259-454-11	CARBON	12K	5%	1/6W	
R404	1-259-484-11	CARBON	220K	5%	1/6W	
R405	1-259-446-11	CARBON	5.6K	5%	1/6W	
R406	1-259-422-11	CARBON	560	5%	1/6W	
R407	1-259-462-11	CARBON	27K	5%	1/6W	
R408	1-259-438-11	CARBON	2.7K	5%	1/6W	
R410	1-259-412-11	CARBON	220	5%	1/6W	
R412	1-259-428-11	CARBON	1K	5%	1/6W	
R526	1-247-752-11	CARBON	1K	5%	1/2W	
R527	1-247-752-11	CARBON	1K	5%	1/2W	
R626	1-247-752-11	CARBON	1K	5%	1/2W	
R627	1-247-752-11	CARBON	1K	5%	1/2W	
R706	1-247-818-11	CARBON	300	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R707	1-247-903-00	CARBON	1M	5%	1/4W	
R710	1-249-399-11	CARBON	33	5%	1/4W	F
R715	1-249-429-11	CARBON	10K	5%	1/4W	
R716	1-249-429-11	CARBON	10K	5%	1/4W	
R718	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R719	1-249-429-11	CARBON	10K	5%	1/4W	
R720	1-249-429-11	CARBON	10K	5%	1/4W	
R721	1-249-417-11	CARBON	1K	5%	1/4W	F
R722	1-249-429-11	CARBON	10K	5%	1/4W	
R723	1-249-417-11	CARBON	1K	5%	1/4W	F
R724	1-249-393-11	CARBON	10	5%	1/4W	F
R729	1-249-433-11	CARBON	22K	5%	1/4W	
R730	1-249-433-11	CARBON	22K	5%	1/4W	
R731	1-249-433-11	CARBON	22K	5%	1/4W	
R732	1-249-433-11	CARBON	22K	5%	1/4W	
R733	1-249-433-11	CARBON	22K	5%	1/4W	
R739	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R740	1-249-393-11	CARBON	10	5%	1/4W	F
R741	1-249-393-11	CARBON	10	5%	1/4W	F
		< VARIABLE RESISTOR >				
RV301	1-223-397-11	RES, VAR, CARBON 100K/100K				
RV302	1-223-397-11	RES, VAR, CARBON 100K/100K				
RV303	1-223-396-11	RES, VAR, CARBON 100K/100K				
RV304	1-223-395-11	RES, VAR, CARBON 100K/100K				
		< SWITCH >				
S701	1-554-303-21	SWITCH, TACTILE (DAT/TAPE1)				
S702	1-554-303-21	SWITCH, TACTILE (TAPE2)				
S703	1-554-303-21	SWITCH, TACTILE (CD)				
S704	1-554-303-21	SWITCH, TACTILE (TUNER)				
S705	1-554-303-21	SWITCH, TACTILE (PHONO)				
		< VIBRATOR >				
X700	1-577-077-21	OSCILLATOR, CERAMIC				
**********						
*	1-648-229-11	HP BOARD				
		********				
		< CAPACITOR >				
C807	1-136-153-00	FILM	0.01uF	5%	50V	
C952	1-162-282-31	CERAMIC	100PF	10%	50V	
C953	1-162-282-31	CERAMIC	100PF	10%	50V	
		< CONNECTOR >				
CNP501	1-506-906-11	PIN, CONNECTOR 5P				

MAIN

Ref. No.	Part No.	Description			Remark
		< JACK >			
J501	1-563-347-11	JACK, LARGE TYPE (HEADPHONES)			
**********					
	A-4360-799-A	MAIN BOARD, COMPLETE (AE1)			
		**********			
*	A-4360-800-A	MAIN BOARD, COMPLETE (AE2)			
		**********			
*	A-4360-802-A	MAIN BOARD, COMPLETE (UK)			
		**********			
*	A-4360-801-A	MAIN BOARD, COMPLETE (G)			
		**********			
*	A-4360-804-A	MAIN BOARD, COMPLETE (AUSTRALIAN)			
		**********			
	1-648-230-11	MAIN BOARD			
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3			
		< CAPACITOR >			
C101	1-123-369-00	ELECT	4.7uF	20%	50V
C102	1-124-910-11	ELECT	47uF	20%	50V
C103	1-164-077-11	CERAMIC	220PF	10%	50V
C104	1-130-480-00	MYLAR	0.0056uF	5%	50V
C105	1-104-842-91	MYLAR	0.0016uF	5%	50V
C106	1-123-369-00	ELECT	4.7uF	20%	50V
C108	1-164-073-11	CERAMIC	100PF	10%	50V
C150	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C151	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C152	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C153	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C154	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C155	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C201	1-123-369-00	ELECT	4.7uF	20%	50V
C202	1-124-910-11	ELECT	47uF	20%	50V
C203	1-164-077-11	CERAMIC	220PF	10%	50V
C204	1-130-480-00	MYLAR	0.0056uF	5%	50V
C205	1-104-842-91	MYLAR	0.0016uF	5%	50V
C206	1-123-369-00	ELECT	4.7uF	20%	50V
C208	1-164-073-11	CERAMIC	100PF	10%	50V
C250	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C251	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C252	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C253	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C254	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C255	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C300	1-164-073-11	CERAMIC	100PF	10%	50V
		(AEP, UK, E, AUSTRALIAN)			
C311	1-124-902-00	ELECT	0.47uF	20%	50V
C400	1-164-073-11	CERAMIC	100PF	10%	50V
		(AEP, UK, E, AUSTRALIAN)			

Ref. No.	Part No.	Description			Remark
C411	1-124-902-00	ELECT	0.47uF	20%	50V
C501	1-123-369-00	ELECT	4.7uF	20%	50V
C502	1-164-073-11	CERAMIC	100PF	10%	50V
C503	1-164-083-11	CERAMIC	680PF	10%	50V
C504	1-101-810-00	CERAMIC	100PF	5%	500V (G)
C504	1-102-233-00	CERAMIC	33PF	10%	500V
		(AEP, UK, E, AUSTRALIAN)			
C505	1-124-910-11	ELECT	47uF	20%	50V
C506	1-124-122-11	ELECT	100uF	20%	16V
C507	1-102-943-00	CERAMIC	6.0PF	+-0.5PF	50V
		(AEP, UK, E, AUSTRALIAN)			
C507	1-164-044-11	CERAMIC	8PF	0.5PF	50V (G)
C511	1-136-163-00	FILM	0.068uF	5%	50V
C512	1-136-163-00	FILM	0.068uF	5%	50V
C550	1-136-153-00	FILM	0.01uF	5%	50V (G)
C551	1-162-282-31	CERAMIC	100PF	10%	50V (G)
C601	1-123-369-00	ELECT	4.7uF	20%	50V
C602	1-164-073-11	CERAMIC	100PF	10%	50V
C603	1-164-083-11	CERAMIC	680PF	10%	50V
C604	1-101-810-00	CERAMIC	100PF	5%	500V (G)
C604	1-102-233-00	CERAMIC	33PF	10%	500V
		(AEP, UK, E, AUSTRALIAN)			
C605	1-124-910-11	ELECT	47uF	20%	50V
C606	1-124-122-11	ELECT	100uF	20%	16V
C607	1-102-943-00	CERAMIC	6.0PF	+-0.5PF	50V
		(AEP, UK, E, AUSTRALIAN)			
C607	1-164-044-11	CERAMIC	8PF	0.5PF	50V (G)
C611	1-136-163-00	FILM	0.068uF	5%	50V
C612	1-136-163-00	FILM	0.068uF	5%	50V
C650	1-136-153-00	FILM	0.01uF	5%	50V (G)
C651	1-162-282-31	CERAMIC	100PF	10%	50V (G)
C701	1-161-494-00	CERAMIC	0.022uF		25V
C703	1-124-925-11	ELECT	2.2uF	20%	100V
C704	1-126-926-11	ELECT	1000uF	20%	10V
C706	1-164-159-11	CERAMIC	0.1uF		50V
C716	1-124-907-11	ELECT	10uF	20%	50V
C717	1-124-907-11	ELECT	10uF	20%	50V
C802	1-126-176-11	ELECT	220uF	20%	10V
C804	1-124-034-51	ELECT	33uF	20%	16V
C805	1-124-925-11	ELECT	2.2uF	20%	100V
C806	1-124-443-00	ELECT	100uF	20%	10V
C901	1-136-153-00	FILM	0.01uF	5%	50V
C902	1-124-557-11	ELECT	1000uF	20%	25V
C903	1-136-165-00	FILM	0.1uF	5%	50V
C904	1-123-306-00	ELECT	47uF	20%	10V
C905	1-106-379-12	MYLAR	0.033uF	5%	200V
C906	1-106-379-12	MYLAR	0.033uF	5%	200V
C907	1-104-836-11	ELECT	4700uF	20%	50V
		(AEP, UK, E, AUSTRALIAN)			

Ref. No.	Part No.	Description			Remark
C907	1-104-837-11	ELECT	6800uF	20%	42V (G)
C908	1-104-836-11	ELECT	4700uF	20%	50V
		(AEP, UK, E, AUSTRALIAN)			
C908	1-104-837-11	ELECT	6800uF	20%	42V (G)
C909	1-123-306-00	ELECT	47uF	20%	10V
C910	1-123-306-00	ELECT	47uF	20%	10V
C911	1-124-122-11	ELECT	100uF	20%	50V
C912	1-124-122-11	ELECT	100uF	20%	50V
C913	1-123-306-00	ELECT	47uF	20%	10V
C914	1-123-306-00	ELECT	47uF	20%	10V
C915	1-136-153-00	FILM	0.01uF	5%	50V
C950	1-130-789-00	FILM	1uF	5%	100V (G)
C955	1-164-073-11	CERAMIC	100PF	10%	50V (G)
C956	1-164-073-11	CERAMIC	100PF	10%	50V (G)
C957	1-106-379-12	MYLAR	0.033uF	5%	200V
		< CONNECTOR >			
CNJ401	1-750-227-11	CONNECTOR, FFC/FPC 17P			
CNJ402	1-750-598-11	CONNECTOR, FFC/FPC 9P			
CNJ701	1-566-213-11	PIN, CONNECTOR 4P			
CNP801	1-564-242-00	PIN, CONNECTOR 5P			
		< DIODE >			
D501	8-719-987-63	DIODE	1N4148M		
D502	8-719-987-63	DIODE	1N4148M		
D503	8-719-987-63	DIODE	1N4148M		
D504	8-719-987-63	DIODE	1N4148M		
D505	8-719-987-63	DIODE	1N4148M		
D506	8-719-987-63	DIODE	1N4148M		
D601	8-719-987-63	DIODE	1N4148M		
D602	8-719-987-63	DIODE	1N4148M		
D603	8-719-987-63	DIODE	1N4148M		
D604	8-719-987-63	DIODE	1N4148M		
D605	8-719-987-63	DIODE	1N4148M		
D606	8-719-987-63	DIODE	1N4148M		
D700	8-719-987-63	DIODE	1N4148M		
D706	8-719-200-82	DIODE	11ES2		
D715	8-719-933-35	DIODE	HZS6A3L		
D716	8-719-987-63	DIODE	1N4148M		
D717	8-719-987-63	DIODE	1N4148M		
D721	8-719-987-63	DIODE	1N4148M		
D723	8-719-987-63	DIODE	1N4148M		
D801	8-719-200-82	DIODE	11ES2		
D802	8-719-987-63	DIODE	1N4148M		
D803	8-719-987-63	DIODE	1N4148M		
D901	8-719-312-09	DIODE	RBA-402		
D902	8-719-200-82	DIODE	11ES2		
D903	8-719-200-82	DIODE	11ES2		
D904	8-719-200-82	DIODE	11ES2		
D905	8-719-200-82	DIODE	11ES2		
D906	8-719-001-15	DIODE	UZL-9M2		
D907	8-719-001-18	DIODE	UZL-9M3		
		< IC >			
IC101	8-759-634-51	IC	M5218AP		
IC102	8-759-000-49	IC	MC14066BPC		
IC702	8-759-802-52	IC	LC7818		
IC801	8-759-111-68	IC	uPC1237HA		
IC901	8-759-820-84	IC	L78MR05		
		< JACK >			
J101	1-566-883-81	JACK, PIN 6P			
J102	1-566-882-51	JACK, PIN 4P			
J103	1-566-882-51	JACK, PIN 4P			
		< COIL >			
L100	1-410-979-11	INDUCTOR	220uH (G)		
L200	1-410-979-11	INDUCTOR	220uH (G)		
* L501	1-420-872-00	COIL, AIR CORE	1.9uHz		
* L601	1-420-872-00	COIL, AIR CORE	1.9uHz		
		< TRANSISTOR >			
Q301	8-729-141-26	TRANSISTOR	2SC3622A-LK		
Q401	8-729-141-26	TRANSISTOR	2SC3622A-LK		
Q501	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q502	8-729-620-17	TRANSISTOR	2SC2259-FG		
Q503	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA		
Q504	8-729-021-74	TRANSISTOR	2SA949-OY-TPE6		
Q505	8-729-209-15	TRANSISTOR	2SD2012		
Q506	8-729-020-82	TRANSISTOR	2SC3421-OY		
Q507	8-729-020-83	TRANSISTOR	2SA1358-OY		
Q508	8-729-021-75	TRANSISTOR	2SC4689-RO		
Q509	8-729-021-76	TRANSISTOR	2SA1804-RO		
Q510	8-729-140-82	TRANSISTOR	2SA988-PAFAEA		
Q601	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q602	8-729-620-17	TRANSISTOR	2SC2259-FG		
Q603	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA		
Q604	8-729-021-74	TRANSISTOR	2SA949-OY-TPE6		
Q605	8-729-209-15	TRANSISTOR	2SD2012		
Q606	8-729-020-82	TRANSISTOR	2SC3421-OY		
Q607	8-729-020-83	TRANSISTOR	2SA1358-OY		
Q608	8-729-021-75	TRANSISTOR	2SC4689-RO		
Q609	8-729-021-76	TRANSISTOR	2SA1804-RO		
Q610	8-729-140-82	TRANSISTOR	2SA988-PAFAEA		
Q701	8-729-900-63	TRANSISTOR	DTA124ES		
Q702	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q703	8-729-900-63	TRANSISTOR	DTA124ES		
Q706	8-729-900-36	TRANSISTOR	DTC124ES		

MAIN

Ref. No.	Part No.	Description				Remark
Q707	8-729-900-63	TRANSISTOR	DTA124ES			
Q708	8-729-900-36	TRANSISTOR	DTC124ES			
Q709	8-729-900-63	TRANSISTOR	DTA124ES			
Q710	8-729-900-63	TRANSISTOR	DTA124ES			
Q712	8-729-900-36	TRANSISTOR	DTC124ES			
Q713	8-729-900-36	TRANSISTOR	DTC124ES			
Q801	8-729-620-05	TRANSISTOR	2SC2603-EF			
Q802	8-729-900-36	TRANSISTOR	DTC124ES			
Q803	8-729-900-63	TRANSISTOR	DTA124ES			
Q901	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q902	8-729-140-82	TRANSISTOR	2SA988-PAFAEA			
		< RESISTOR >				
R102	1-247-700-11	CARBON	100	5%	1/4W	
		(AEP, UK, E, AUSTRALIAN)				
R102	1-247-718-11	CARBON	2.7K	5%	1/4W	(G)
R103	1-249-466-11	CARBON	56K	5%	1/4W	
R104	1-247-712-11	CARBON	820	5%	1/4W	
R105	1-214-958-00	METAL	560K	1%	1/4W	
R106	1-249-465-11	CARBON	47K	5%	1/4W	
R108	1-247-704-11	CARBON	220	5%	1/4W	
R109	1-247-713-11	CARBON	1K	5%	1/4W	F
R110	1-247-708-11	CARBON	470	5%	1/4W	(G)
R111	1-247-713-11	CARBON	1K	5%	1/4W	F
R112	1-247-708-11	CARBON	470	5%	1/4W	(G)
R113	1-247-708-11	CARBON	470	5%	1/4W	(G)
R114	1-247-708-11	CARBON	470	5%	1/4W	(G)
R121	1-247-706-11	CARBON	330	5%	1/4W	F
R202	1-247-700-11	CARBON	100	5%	1/4W	
		(AEP, UK, E, AUSTRALIAN)				
R202	1-247-718-11	CARBON	2.7K	5%	1/4W	(G)
R203	1-249-466-11	CARBON	56K	5%	1/4W	
R204	1-247-712-11	CARBON	820	5%	1/4W	
R205	1-214-958-00	METAL	560K	1%	1/4W	
R206	1-249-465-11	CARBON	47K	5%	1/4W	
R208	1-247-704-11	CARBON	220	5%	1/4W	
R209	1-247-713-11	CARBON	1K	5%	1/4W	F
R210	1-247-708-11	CARBON	470	5%	1/4W	(G)
R211	1-247-713-11	CARBON	1K	5%	1/4W	F
R212	1-247-708-11	CARBON	470	5%	1/4W	(G)
R213	1-247-708-11	CARBON	470	5%	1/4W	(G)
R214	1-247-708-11	CARBON	470	5%	1/4W	(G)
R221	1-247-706-11	CARBON	330	5%	1/4W	F
R311	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R411	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R501	1-247-713-11	CARBON	1K	5%	1/4W	F
R502	1-249-466-11	CARBON	56K	5%	1/4W	
R503	1-247-710-11	CARBON	560	5%	1/4W	
R504	1-247-710-11	CARBON	560	5%	1/4W	
R505	1-247-704-11	CARBON	220	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R506	1-247-704-11	CARBON	220	5%	1/4W	
R507	1-247-887-00	CARBON	220K	5%	1/4W	
R508	1-247-704-11	CARBON	220	5%	1/4W	
R509	1-247-718-11	CARBON	2.7K	5%	1/4W	
R510	1-247-713-11	CARBON	1K	5%	1/4W	F
R511	1-247-725-11	CARBON	10K	5%	1/4W	
R512	1-247-721-11	CARBON	4.7K	5%	1/4W	
		(AEP, UK, E, AUSTRALIAN)				
R512	1-247-722-11	CARBON	5.6K	5%	1/4W	(G)
⚠R513	1-212-893-00	FUSIBLE	330	5%	1/4W	F
⚠R514	1-212-857-00	FUSIBLE	10	5%	1/4W	F
R515	1-247-727-11	CARBON	10	5%	1/2W	
R516	1-247-727-11	CARBON	10	5%	1/2W	
⚠R517	1-212-857-00	FUSIBLE	10	5%	1/4W	F
⚠R518	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
⚠R519	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
⚠R520	1-217-611-00	RES, METAL PLATE	0.1		2W	
⚠R521	1-217-611-00	RES, METAL PLATE	0.1		2W	
R522	1-247-887-00	CARBON	220K	5%	1/4W	
R523	1-249-431-11	CARBON	15K	5%	1/4W	
R524	1-249-466-11	CARBON	56K	5%	1/4W	
⚠R525	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R601	1-247-713-11	CARBON	1K	5%	1/4W	F
R602	1-249-466-11	CARBON	56K	5%	1/4W	
R603	1-247-710-11	CARBON	560	5%	1/4W	
R604	1-247-710-11	CARBON	560	5%	1/4W	
R605	1-247-704-11	CARBON	220	5%	1/4W	
R606	1-247-704-11	CARBON	220	5%	1/4W	
R607	1-247-887-00	CARBON	220K	5%	1/4W	
R608	1-247-704-11	CARBON	220	5%	1/4W	
R609	1-247-718-11	CARBON	2.7K	5%	1/4W	
R610	1-247-713-11	CARBON	1K	5%	1/4W	F
R611	1-247-725-11	CARBON	10K	5%	1/4W	
R612	1-247-721-11	CARBON	4.7K	5%	1/4W	
		(AEP, UK, E, AUSTRALIAN)				
R612	1-247-722-11	CARBON	5.6K	5%	1/4W	(G)
⚠R613	1-212-893-00	FUSIBLE	330	5%	1/4W	F
⚠R614	1-212-857-00	FUSIBLE	10	5%	1/4W	F
R615	1-247-727-11	CARBON	10	5%	1/2W	
R616	1-247-727-11	CARBON	10	5%	1/2W	
⚠R617	1-212-857-00	FUSIBLE	10	5%	1/4W	F
⚠R618	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
⚠R619	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
⚠R620	1-217-611-00	RES, METAL PLATE	0.1		2W	
⚠R621	1-217-611-00	RES, METAL PLATE	0.1		2W	
R622	1-247-887-00	CARBON	220K	5%	1/4W	
R623	1-249-431-11	CARBON	15K	5%	1/4W	
R624	1-249-466-11	CARBON	56K	5%	1/4W	
⚠R625	1-249-421-11	CARBON	2.2K	5%	1/4W	F

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description				Remark
R701	1-247-901-11	CARBON	820K	5%	1/4W	
R702	1-249-433-11	CARBON	22K	5%	1/4W	
R703	1-249-433-11	CARBON	22K	5%	1/4W	
R704	1-249-433-11	CARBON	22K	5%	1/4W	
R705	1-249-433-11	CARBON	22K	5%	1/4W	
R711	1-249-433-11	CARBON	22K	5%	1/4W	
R712	1-249-433-11	CARBON	22K	5%	1/4W	
R727	1-249-438-11	CARBON	56K	5%	1/4W	
R734	1-249-433-11	CARBON	22K	5%	1/4W	
R735	1-249-433-11	CARBON	22K	5%	1/4W	
R736	1-249-434-11	CARBON	27K	5%	1/4W	
R742	1-249-405-11	CARBON	100	5%	1/4W	F
R743	1-249-435-11	CARBON	33K	5%	1/4W	
R750	1-249-405-11	CARBON	100K	5%	1/4W	
R802	1-249-441-11	CARBON	100K	5%	1/4W	
R804	1-247-881-00	CARBON	120K	5%	1/4W	
R805	1-249-430-11	CARBON	12K	5%	1/4W	
R806	1-247-754-11	CARBON	1.5K	5%	1/2W	(G)
R806	1-247-756-11	CARBON	2.2K	5%	1/2W	
		(AEP, UK, E, AUSTRALIAN)				
R807	1-247-754-11	CARBON	1.5K	5%	1/2W	(G)
R807	1-247-756-11	CARBON	2.2K	5%	1/2W	
		(AEP, UK, E, AUSTRALIAN)				
R808	1-247-754-11	CARBON	1.5K	5%	1/2W	(G)
R808	1-247-756-11	CARBON	2.2K	5%	1/2W	
		(AEP, UK, E, AUSTRALIAN)				
R810	1-247-754-11	CARBON	1.5K	5%	1/2W	(G)
R810	1-247-755-11	CARBON	1.8K	5%	1/2W	
		(AEP, UK, E, AUSTRALIAN)				
R811	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R812	1-249-441-11	CARBON	100K	5%	1/4W	
R813	1-249-433-11	CARBON	22K	5%	1/4W	
R814	1-249-433-11	CARBON	22K	5%	1/4W	
R904	1-249-459-11	CARBON	12K	5%	1/4W	
R905	1-249-459-11	CARBON	12K	5%	1/4W	
R907	1-247-249-00	CARBON	2.4K	5%	1/2W	(G)
R907	1-247-253-00	CARBON	3.6K	5%	1/2W	
		(AEP, UK, E, AUSTRALIAN)				
R908	1-247-249-00	CARBON	2.4K	5%	1/2W	(G)
R908	1-247-253-00	CARBON	3.6K	5%	1/2W	
		(AEP, UK, E, AUSTRALIAN)				
R909	1-247-249-00	CARBON	2.4K	5%	1/2W	(G)
R909	1-247-253-00	CARBON	3.6K	5%	1/2W	
		(AEP, UK, E, AUSTRALIAN)				
R910	1-247-249-00	CARBON	2.4K	5%	1/2W	(G)
R910	1-247-253-00	CARBON	3.6K	5%	1/2W	
		(AEP, UK, E, AUSTRALIAN)				
R911	1-247-249-00	CARBON	2.4K	5%	1/2W	(G)
R911	1-247-253-00	CARBON	3.6K	5%	1/2W	
		(AEP, UK, E, AUSTRALIAN)				
R912	1-247-249-00	CARBON	2.4K	5%	1/2W	(G)
R912	1-247-253-00	CARBON	3.6K	5%	1/2W	
		(AEP, UK, E, AUSTRALIAN)				
R950	1-247-732-11	CARBON	27	5%	1/2W	(G)
		< VARIABLE RESISTOR >				
RV501	1-237-455-11	RES, ADJ, CARBON 500				
RV601	1-237-455-11	RES, ADJ, CARBON 500				
		< RELAY >				
RY801	1-515-920-11	RELAY (24V)				
RY802	1-515-793-11	RELAY				
		< THERMISTOR(POSITIVE) >				
⚠THP900	1-806-882-11	THERMISTOR, POSITIVE 2.2				
		< TERMINAL >				
TM501	1-537-530-11	TERMINAL BOARD (G)				
TM501	1-537-530-21	TERMINAL BOARD (AE1, UK, E, AUSTRALIAN)				
TM501	1-537-530-31	TERMINAL BOARD (AE2)				
**********						
*	1-648-228-11	TRANS BOARD				
		**********				
		< CAPACITOR >				
C951	1-164-097-11	CERAMIC	0.022uF		50V	(G)
		< TRANSFORMER >				
⚠T1	1-423-676-11	TRANSFORMER, POWER (AEP)				
⚠T1	1-423-677-11	TRANSFORMER, POWER (G)				
⚠T1	1-423-678-11	TRANSFORMER, POWER (E)				
⚠T1	1-423-681-11	TRANSFORMER, POWER (UK, AUSTRALIAN)				
**********						
	1-648-227-11	VOL SEL BOARD (E)				
		**********				
		< CONNECTOR >				
CNP10	1-564-321-00	PIN, CONNECTOR 2P				
CNP20	1-568-106-11	PIN, CONNECTOR 4P				
CNP30	1-564-687-11	PIN, CONNECTOR 3P				
		< SWITCH >				
⚠S2	1-572-009-11	SELECTOR, VOLTAGE (VOLTAGE SELECTOR)				
**********						

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
⚠AD1	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
⚠CP1	1-575-651-21	CORD, POWER (AEP, G)	
⚠CP1	1-696-027-11	CORD, POWER (E)	
⚠CP1	1-696-586-11	CORD, POWER (UK)	
⚠CP1	1-696-845-11	CORD, POWER (AUSTRALIAN)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		******************************	
	1-467-107-11	REMOTE COMMANDER (RM-S312)	
	3-756-853-11	MANUAL, INSTRUCTION (English, French, Spanish, Portguese) (AEP, UK, E, AUSTRALIAN)	
	3-756-853-41	MANUAL, INSTRUCTION (German, Dutch, Swedish, ItaLian) (AEP)	
	3-756-853-51	MANUAL, INSTRUCTION (German) (G)	
*	4-931-988-71	INDIVIDUAL CARTON	
	4-941-762-11	COVER (MLY), BATTERY	
*	4-959-584-01	CUSHION	
**********			
		*************************	
		HARDWARE LIST	
		*************************	
#1	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S	
#2	7-682-560-04	SCREW +BVTT 4X6 (S)	
#3	7-621-849-00	SCREW (BV/RING)	
#4	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	

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